

### REMARKS/ARGUMENTS

Claims 15, 16, 18-25, 29, 36 and 37 are active in this application. Claim 15 has been amended to include the micronutrients from Claim 17. No new matter is added by these amendments.

The rejection of Claim 14 under 35 U.S.C. § 102(a) in view of Connolly is obviated by the cancellation of Claim 14.

Turning to the rejections of Claim 15 and the various dependent claims thereon in which the Examiner has combined Connolly with Kurppa and others, these rejections are untenable for the following reason.

First, the Examiner contends that Connolly describes a sports drink “because the reference discloses a liquid and the claimed bacteria.” (Page 2 of the Official Action). This is a mischaracterization of Connolly. In fact, the entire disclosure of Connolly is to prepare a powdered or **dried** preparation of milk protein with probiotic bacteria. For example, in describing the process for making this protein concentrate in paragraphs [0059] and [0068], Connolly describes preparing a culture in which the organisms are grown to which milk proteins are added to a desired concentration. Connolly describes “then one **spray dries** the fluid inoculated concentrate under a gentle, low heat condition, to protect the organisms, and turn it into a **powder**.” (Emphasis provided).

Connolly also describes a number of possible probiotic bacteria, several of which are listed in paragraphs [0062]-[0068]. Connolly does not exemplify any specific strains and certainly does not suggest the Lactobacilli as claimed. In fact, among this general listing of certain Lactobacillus and Bifidiobacterial species that Connolly describes, Connolly does not even hint at the variation that occurs in various strains of these bacterial species nor provide any reason to look for those Lactobacilli as claimed. As a result, Connolly neither describes nor suggests the desire to select certain “viable Lactobacilli having a positive effect on human

and intestinal mucosa” (Claim 15) from the number of possible probiotic organisms Connolly describes.

Put very simply, Connolly does NOT describe a sports drink or provide any suggestion to select the viable Lactobacilli as claimed. While Kurppa does describe various ingredients in sports drinks, there is simply no reason why one would have combined the ingredients in Kurppa with the dried milk protein concentrate in Connolly without using Applicants’ claims and specification as a guide.

Even assuming for arguments sake that one would have combined these two disclosures, the combination of publications simply does not suggest selecting viable lactobacilli as those claimed in the present set of claims. As stated throughout the specification, the advantages of the claimed sports drink is to provide, in addition to nutrients and fluid supplementation during physical activity, positive effects on the human intestinal mucosa. Not all microorganisms have such features because they would not survive in such a sports drink together with the other components, which as stated in the claim must be viable. Furthermore, the combination of these two publications fails to suggests the advantages of the claimed sports drink, referring to page 3 of the present application: “It has now surprisingly been shown that viable Lactobacilli can be mixed with micronutrients, carbohydrates, salts and proteins, without negative effects on e.g., antioxidants, to a beverage having a good taste and a shelf-life.”

Accordingly, the rejection of Claims 15, 25, 33, 34, 35, 36 and 37 under 35 U.S.C. § 103(a) in view of Connolly and Kurppa should be withdrawn.

Now to the remaining obviousness rejections.

The addition of Molin and Wilkes to Connolly and Kurppa doesn’t get one any closer to the claimed invention because the combination of these four references also fails to suggest the selection of viable Lactobacilli having a positive effect on human intestinal mucosa and

combining the same with the micronutrients and additives as claimed. In fact, Molin simply describes a health drink for horses containing various nutrients and Lactobacilli (see page 2, lines 11-17)—noting that the claims require lactobacilli require an effect on humans. In fact, Molin describes that the Lactobacilli useful for the invention must meet certain characteristics to be suitable for the administration to horses for the “prevention of diarrhoe” (page 2, lines 18-21 and page 3, lines 23 to page 4, line 13) but does not describe anything relating to the positive effect on human intestinal mucosa as claimed. Without straying too far from the point, certainly the Office recognizes that the digestive tract and general physiology between horses and humans are different. Further, treating diarrhea in horses has nothing to do with providing a positive effect on intestinal mucosa in humans undergoing physical activity. Why then is Molin even applicable to the claimed invention?

Wilkes simply describes that minerals are used in beverages to improve athletic performance.

Once again, the combination of Molin and Wilkes with Connolly and Kurppa fails to suggest or provide any reasonable motivation to select certain lactobacilli and combining the same with additives and micronutrients as claimed. Therefore, the claims could not have been obvious based on the combination of Molin and Wilkes with Connolly and Kurppa and as such the rejection based on this combination of publications should be withdrawn.

Turning to the last two rejections which add Masuyama and Portman. Masuyama simply describes forming tablets and Portman describes using whey proteins. However, even when combined with the four publications of Molin, Wilkes, Connolly and Kurppa, the combination fails to suggest or provide any reasonable motivation to select certain lactobacilli and combining the same with additives and micronutrients as claimed. Therefore, the rejections of Claims 22, 23, 30 and 31 (which includes Portman) and Claim 24 (which includes Masuyama) should also be withdrawn.

Accordingly, and in view of the above comments, Applicants request a Notice of Allowance for Claims 15, 16, 18-25, 27-29, 36 and 37. At minimum, Applicants request entry of the amendments submitted herein as they simplify the issues for appeal.

Respectfully submitted,

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